

EXHIBIT 33

FINAL

INTERIM MEASURES CONSTRUCTION WORK PLAN

VOLUME I

Prepared for
Container Properties, L.L.C.
Former Rhone Poulenc Site

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URS

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above, the planned sampling and analysis program for the groundwater pretreatment system is summarized on Table 6-1. Based on the likely KCDNRP requirements, toluene concentrations and breakthrough will determine the frequency of carbon changeouts. The influent to the pretreatment system will be sampled quarterly from the recovery well located nearest to the source area and analyzed for pH, total metals, and benzene, toluene, ethylbenzene, and xylenes (BTEX) to assess potential changes in the recovered groundwater quality.

Table 6-1
Groundwater Pretreatment System Monitoring

Sampling Frequency	Analytical Parameters	Sample Point
Semimonthly ^a	TSS, TOC, pH (field)	Filter Influent
Semimonthly ^a	TOC	Lead GAC Canister (C-1) Effluent
Semimonthly ^a	TOC, TSS	Lag GAC Canister (C-2) Effluent
Monthly	Toluene, KCDNRP parameters ^b	Filter Influent
Monthly	Toluene	Lead GAC Canister (C-1) Effluent
Monthly	KCDNRP parameters ^b	Lag GAC Canister (C-2) Effluent
Quarterly	PH (field) BTEX, total metals	Recovery well nearest toluene plume

^aSemi-monthly inspections may be reduced to monthly at the discretion of the Engineer after system performance is evaluated using the data from the first 6 months of operation.

^bKCDNRP parameters are determined after submittal of the permit; however, it is likely that the effluent will be monitored regularly for settleable solids, pH, total metals, and BTEX.

Samples will be collected as follows:

- Purge a minimum of 500 milliliters (mL) from the sample tap into a container.
- Gently fill the sample container directly from the sample tap, extending the sample tap tubing to the bottom of the container.
- Analyze samples as indicated in Table 6-1. Samples for toluene and BTEX must be collected in a volatile organic analysis (VOA) vial and filled without any headspace.

Samples collected for monitoring the groundwater treatment system will be labeled, and handled in accordance with the quality control procedures specified in the Interim Measures Performance Monitoring Plan Quality Assurance Project Plan (PMP-QAPP) (Appendix J).

General inspection and maintenance of the groundwater pretreatment system will initially be performed during the scheduled site visits. Piping, fittings, and valves will be inspected for leaks, cracks, damage, and obstructions. Centrifugal pumps will be checked for proper operation and maintained in accordance with manufacturer's instructions. Treatment equipment will be inspected for defects, signs of wear, damage, or over-pressure. Each inspection will be logged in the treatment plant logbook. Maintenance needs will be recorded in the logbook. The final action taken for maintenance requests will be noted in the logbook.

The draft PMP is currently being revised to address EPA's comments. Container Properties requested a schedule extension for submittal of the final PMP, and EPA granted this extension on October 21, 2002. The final PMP will be submitted to EPA by November 25, 2002. While the final PMP has not been submitted, performance monitoring will include:

- Synoptic groundwater levels will be collected manually from the barrier wall monitoring network (interior and exterior wells) and from each of the extraction wells upon completion of the barrier wall construction. The manual water level measurements will be collected near a high or low tide to minimize error due to rapid changes in tide levels.
- Continuous water level monitoring for a period of one month in the 13 exterior wells and the 12 interior wells—Water level monitoring prior to the start of pumping will allow for selection of the primary control wells for the groundwater recovery system, and will also provide information about the effectiveness of the wall, as indicated by measured levels inside and outside the wall during diurnal tide fluctuations that will occur on the outside of the wall.
- Monthly, manual synoptic water level monitoring in the monitoring well network—Monthly monitoring will continue until water level conditions inside the wall reach steady-state. It is anticipated that it will take several months to establish steady state conditions in the interior of the wall.
- Monthly sampling of exterior wells located along the bank of the Duwamish waterway (west and south barrier walls) for measurement of general parameters—General water quality parameters will include measurement of the temperature, pH, specific conductance, oxidation/reduction potential, and dissolved oxygen.
- Quarterly sampling of the same exterior and interior wells that will be sampled during pre-construction, and analysis for the same parameters (BTEX, dissolved and total metals, and major cations and anions).

Additional details regarding the PMP for the RPI site will be provided in the final PMP plan.

6.3 INTERIM MEASURES INSPECTION AND MAINTENANCE PLAN

The interim measures for the RPI site require periodic inspection and maintenance to ensure that interim action objectives are attained. Inspection and maintenance for the groundwater treatment system were discussed in Section 6.1. The plan for inspecting and maintaining the security system and the barrier wall are described below. The security system must be adequately maintained to avoid inadvertent access to the site by the general public. The barrier wall must be inspected and maintained to address failures identified by the performance monitoring system, settlement failures, and potential failures that may occur due to disaster events (such as an earthquake or flood). Any failures of the site security system, or barrier wall (including the groundwater recovery and pretreatment system) will be repaired or addressed in a timely manner.

All equipment failures or problems will be reported in the monthly progress reports required by the Order.

6.3.1 Security System Inspection and Maintenance

The security system for the RPI site consists of a temporary fence that encloses the north and eastern borders of the contaminated area and a permanent fence along the waterway and Slip 6. Signs clearly identifying the site and restricting access have been placed along the fence. The existing temporary fence has been in-place at the RPI site for several years. The existing temporary and permanent fences will be maintained to provide site security after completing interim action construction. The temporary fence will be visually inspected quarterly to ensure it is in good repair and that signage is present and legible.

6.3.2 Barrier Walls

Post-construction inspection of the barrier wall will consist of quarterly site walks around the entire alignment to observe the surface condition of the barrier wall protective cover. The protective cover will be checked for ruts, cracking, ponding, erosion or other signs of failure. Additional inspections will be performed within 30 days of a seismic event, if significant seismic activity (an earthquake of magnitude 5.8 or greater) occurs in the Puget Sound area. In addition, semi-annual monitoring of settlement plates will be performed using survey methods. Monitoring of the settlement plates will be reduced to an annual basis after it is established that settlements along the wall are less than 0.02 feet per year. Observations and measurements will be recorded in an Inspection Log Book and reported as described in Section 7.

The effectiveness of the barrier wall in providing hydraulic control will be evaluated using data collected from the water level monitoring wells installed on either side of the barrier (see Drawing 4 in Appendix A). The water levels will be monitored and reported to EPA on a quarterly basis as described in the revised PMP. In the event that the water level monitoring shows that the barrier wall has potentially failed, EPA will be notified within seven days. Such notification will include all actions taken or planned in response to the failure, and a schedule for implementation of these actions.

If it is determined that a section of the wall is damaged or is not functioning for its intended purpose, the barrier wall may need to be repaired. Repair methods for the wall would be selected at the time the damage is assessed, depending on the nature of the suspected wall damage. Damage to the soil-bentonite wall could be repaired by such methods as vibrating beam/Impermix[®] wall construction, jet grouting, sheet pile installation, or deep soil mixing. The actual method of wall repair would depend on the nature and extent of the suspected wall failure.

6.4 BIOLOGICAL MONITORING

Biological monitoring will be conducted during interim action construction at the RPI site. Details regarding the planned monitoring program are presented in the Biological Monitoring Plan, which is appended to the Biological Assessment. The planned monitoring program is summarized below.